Claims:

1. A method in connection with a measuring device detecting hydrometeors, in which method

- the mechanical impulses of hydrometeors falling on a detection surface are measured,

characterized in that

- part of the measuring device (1) is used to perform a continuous measurement, in order to define a threshold value for an impulse and
- only after the threshold value is exceeded is the final part (2) of the measuring apparatus excited for measuring operations, in order to minimize the power consumption of the apparatus.

2. A method according to Claim 1, **characterized** in that the final part (2) of the measuring apparatus is returned to an inactive state immediately after a measurement.

3. A method according to Claim 1 or 2, **characterized** in that pulse-specific measurement data is recorded (4) in the initial part (1) of the measuring apparatus, so that the final part can read it after excitation.

4. A method according to Claim 1 or 2 or 3, in which, in a first time window (10) after the definition of the threshold value, a first parameter of the impulse, such as the amplitude or rate of change of the pulse, is defined, **characterized** in that, in a second, later time window (11), the same parameter is defined from the impulse and the first and second time-window parameters are compared with each other, in order to eliminate spurious signals.

5. A method according to Claim 4, **characterized** in that the ratio between the first (10) and second (11) time windows is created as the limit value for a spurious signal.

6. A method for measuring hydrometeors, in which method the mechanical impulses of hydrometeors falling on a detection surface, and which exceed a predefined threshold value, are measured, in which case a first parameter such as amplitude or the rate of

change of the pulse is defined in a first time window after the definition of the threshold value, **characterized** in that, in a second, later time window (11), the same parameter is defined from the impulse and the first and second time-window parameters are compared with each other, in order to eliminate spurious signals.

7. A method according to Claim 6, **characterized** in that the ratio between the first (10) and the second (11) time window is created as the limit value for a spurious signal.

8. A method for measuring hydrometeors, in which method

- the mechanical impulses of hydrometeors falling on a detection surface, and which exceed a predefined threshold value, are measured,
- the initiation of the measurement is triggered in connection with pulses exceeding the threshold value,
- in connection with triggering, at least one initial parameter, such as amplitude or the rate of change of the pulse, is defined from the impulse,

characterized in that, after the first measurement, the time is measured which elapses before the parameter has reached a predefined value relative to the initial value of the parameter, and this time is used as a characteristic parameter in filtering.

9. A method for measuring hydrometeors, in which method

- the mechanical impulses of hydrometeors falling on a detection surface, and which exceed a predefined threshold value, are measured,
- the initiation of the measurement is triggered in connection with pulses exceeding the threshold value,
- in connection with triggering, at least one initial parameter, such as amplitude or the rate of change of the pulse, is defined from the impulse,

characterized in that

- the triggering level of the hydrometeor-signal detection circuit (3) is adjusted on the basis of the wind velocity, in such a way that the amplitude of spurious signals caused by the wind remains below the triggering level.

10. A measuring device for detecting hydrometeors, which includes

- a detector part (1), which, in turn, includes

- a detection element (6), for detecting impacts caused by hydrometeors,
- an amplifier circuit (5), for amplifying the output signal of the detection element (6),
- a limit-value circuit (3), for triggering the measurement of impulses exceeding a specific signal level, and
- a processor part (2) for processing the triggered signals,

characterized in that

- the detector part (1) is arranged to perform continual measurement, in order to define the threshold value of the impulse and
- the processor part (2) is arranged to be excited to measurement operations only when the threshold value is exceeded, in order to minimize the power consumption of the measuring apparatus.

11. An apparatus according to Claim 10, **characterized** in that the processor part (2) of the measuring apparatus is arranged to return to an inactive state immediately after measurement.

12. An apparatus according to Claim 10 or 11, **characterized** in that the detector part includes memory means (4) for recording pulse-specific measurement data, which the processor part can read after excitation.